

CLAIMS

1. A biaxial hinge of a biaxial structure having a rotating shaft and an opening/closing shaft, in which a rotating shaft member is fixed to a rotation support member, a rotation-side member is inserted and attached to an outer periphery of said rotating shaft member, and an opening/closing torque unit mechanism for opening and closing operations is disposed to either the left or the right of said rotation-side member, wherein

two or more sets of pressing components in which a pressing member with a substantially spherical distal end is incorporated into an elastic body are assembled in the rotation-side member with an embedded structure, at least one groove extending in a radial direction is formed on one side of a sliding member disposed so as to rotate synchronously with the rotating shaft member, in order to abut against the pressing components and generate a click, and said pressing members and said sliding member are elastically pressed together, thereby generating sliding friction torque and click torque during rotation.

2. A biaxial hinge of a biaxial structure having a rotating shaft and an opening/closing shaft, in which a rotation support member and a sliding member are closely fixed to a rotating shaft member, a rotation-side member is inserted and attached to an outer periphery of said rotating shaft member, and an opening/closing torque unit mechanism for opening and closing operations is disposed to either the left or the right of said rotation-side member, wherein

two or more sets of pressing components in which a pressing member with a substantially spherical distal end is incorporated into an elastic body are assembled in the rotation-side member with an embedded structure, at least one

groove extending in a radial direction is formed on one side of the sliding member closely fixed to the rotation support member is formed in order to abut against the pressing components and generate a click, and said pressing members and said sliding member are elastically pressed together, thereby generating sliding friction torque and click torque during rotation.

3. A biaxial hinge of a biaxial structure having a rotating shaft and an opening/closing shaft, in which a rotation support member is closely fixed to a rotating shaft member, a rotation-side member is inserted and attached to an outer periphery of said rotating shaft member, and an opening/closing torque unit mechanism for opening and closing operations is disposed to either the left or the right of said rotation-side member, wherein

two or more sets of pressing components in which a pressing member with a substantially spherical distal end is incorporated into an elastic body are assembled in the rotation-side member with an embedded structure, at least one groove extending in a radial direction is formed on a face of the side of the rotating shaft support member that abuts against the pressing member in order to abut against the pressing components and generate a click, and said pressing members and said rotating shaft member are elastically pressed together, thereby generating sliding friction torque and click torque during rotation.

4. The biaxial hinge according to any of Claims 1 to 3, wherein one of a coil spring, a coned disk spring, a corrugated leaf spring, and a thin leaf spring is employed as the elastic body.

5. The biaxial hinge according to any of Claims 1 to 4,

wherein a through-hole is provided in a center of the rotating shaft member.

6. The biaxial hinge according to any of Claims 1 to 5, wherein a rotation stopper mechanism to restrict a rotational range between the rotating shaft support member or the rotating shaft member and the rotation-side member is provided.

7. The biaxial hinge according to any of Claims 1 to 6, wherein the opening/closing torque unit mechanism for opening and closing operations is assembled as an independent unit, a click generating mechanism that incorporates a cam or a stopper to limit an opening/ closing angle is installed beforehand in said opening/closing torque unit mechanism, and the opening/closing torque unit mechanism is fitted to the rotation-side member.

8. A portable telephone equipped with the biaxial hinge according to any of Claims 1 to 7.